SCDHEC Earth Today

Lesson Grade Level: 7

Lesson Title: Solid Waste Management

SC State Science Standard(s):

(III, A, 7, g) Analyze the benefits of solid waste management (reduce, reuse, recycle).

Segment Link:

In the second part of the video dealing with recycling.

Lesson Overview:

After watching the video, students will come up with different methods of reducing solid waste in their community so they do not have large, costly, smelly landfills such as the one in the video. This can be done as a class discussion, group activity or individual activity. It should also come after you have discussed this standard in class already. Everyday each of us throws stuff away? Where is away? Usually and eventually, it is a landfill. Landfills are a fact of life. Today's landfills are not just a large hole in the ground. Landfills must meet strict regulations from where they can be built to how they must be managed everyday. Landfills are expensive to design, build and maintain. How much waste do we throw away? Each of us throws away more than 4.5 pounds per day – according to the U.S. Environmental Protection Agency. Americans made more than 231 million tons of garbage in 2000 according to the U.S. EPA. Recycling saves natural resources, energy and sometimes money. Recycling also saves valuable landfill space. Why dispose of something in a landfill if it can be recycled? Many things can be recycled like aluminum, plastic, glass, newspaper and cardboard. These items are traditional recyclables. Many other things cannot be recycled as easily or at all. Some household cleaners, for example, are difficult if not impossible to recycle in some communities. These type of items have to be disposed of properly. Landfills are only one option to manage waste. Other options to deal with waste are incinerators (burning it) and recycling. Many people don't like incineration because they are concerned about the emissions (what is allowed to enter the air). Recycling is another option. It's easy and convenient for most of us. Reducing the amount of waste we make is another option. So is composting. Buying recycled content products is important, too. In fact, you are not really recycling unless you are buying recycled.

Lesson Plan:

- 1. Students will work in small groups or individually after the video to come up with as many ways as possible to deal with solid waste management (other than a landfill).
- 2. The teacher will need to let students know about the complications with solid waste management by addressing the following points with the class: How do landfills work? How do incinerators work? Which of the two are the better options for your community? Does your community have a landfill? How long has it been there? How big is it?
- 3. After the students have developed their methods and alternatives, they should present them and be able to support their ideas, explaining their choices.
- 4. Students should then research the following questions: Where can you buy recycled content products in your community? How could you promote buying recycled content products to your community?